

Abstract of the Disclosure

Z buffer traffic experienced during graphics processing is reduced by using a compression mechanism to reduce the amount of information stored in the z buffer. The compression mechanism may be a delta-based z compression mechanism, which stores deltas in the z buffer rather than actual z values. These deltas may be used at a later time to compute the z values. By storing deltas instead of actual z values, the compression mechanism makes it possible to store significantly less information in the z buffer. By reducing the amount of information stored in the z buffer, less information will be read from and written to the z buffer, which in turn, reduces z buffer traffic. To further reduce z buffer traffic, selected deltas may be stored not in the z buffer but rather in a storage local to a graphics processing mechanism (GPM). Storing selected deltas in local storage obviates the need to read from or write to the z buffer for those deltas. As a result, z buffer traffic is even further reduced.